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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/441,102	11/16/1999	DAVID A. SCHWARTZ	062891.0285	3856

7590 08/13/2004  
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EXAMINER

YAO, KWANG BIN

ART UNIT	PAPER NUMBER
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2667

DATE MAILED: 08/13/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/441,102

**Applicant(s)**

SCHWARTZ ET AL.

**Examiner**

Kwang B. Yao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-23, 25-59 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-8, 10-19, 21-23, 25-29, 31-39, 41-49, 51-57, 59 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (US 6,747,995).

Brown et al. discloses a system for multiple voice lines comprising the following features: as depicted in Fig. 2, regarding claim 1, a backplane (202); a plurality of Backplane

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plane cards (LINE CARD 1, 2, ..., 8) coupled to the backplane (202), each backplane plane card (200) assigned a Media Access Control MAC address; and a backplane switch (201) coupled to the backplane (202) and operable to receive a first data packet with a first MAC address assigned (column 10, line 66 to column 11, line 5) to a backplane plane card (200) and to communicate the first data packet to the backplane plane card (200) assigned the first MAC address using the backplane (202); regarding claim 2, wherein the backplane switch (201) communicates the first data packet to the backplane plane card (200) according to an Ethernet protocol (column 13, lines 52-57); regarding claim 3, wherein the backplane switch (201) is further operable to receive a second data packet with a second MAC address assigned (column 10, line 66 to column 11, line 5) to an external network device and to communicate the second data packet to the network device assigned the second MAC address; regarding claim 4, wherein the backplane switch (201) communicates the second data packet to the network device assigned the second MAC address by communicating the second data packet from an external port to a network switch for further communication to the network device; regarding claim 5, wherein the backplane (202) includes a plurality of backplane buses (202), at least one of the backplane buses (202) providing a dedicated bandwidth between a backplane plane card (200) and the backplane switch (201); regarding claim 6, wherein at least one backplane plane card (200) is a gateway card coupled to a telephone network, the gateway card operable to receive from the telephone network a request to establish a telephone call with an external network device, to identify an Internet Protocol IP address (column 10, lines 17-31) associated with the network device, to process data from the telephone call into digital data packets, to associate the data packets with the identified IP address (column 10, lines 17-31), and to communicate the data packets to the external network

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device using the backplane switch (201) ; regarding claim 7, wherein the external network device is an IP telephone; regarding claim 8, the gateway card is further operable to determine that the data packets include voice information and, in response, to assign a high priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) level to the data packets by setting one or more priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) bits in each of the data packets; and the backplane switch (201) is further operable to communicate the data packets according to the assigned priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) level; regarding claim 10, wherein at least one backplane plane card (200) is a gateway card coupled to a data network, the gateway card operable to receive data packets associated with an Internet Protocol IP address (column 10, lines 17-31) and to communicate the data packets to an external network device assigned the associated IP address (column 10, lines 17-31) using the backplane switch (201) ; regarding claim 11, wherein at least one of the Backplane plane cards (LINE CARD 1, 2, ..., 8) may be coupled to the backplane (202) and de-coupled from the backplane (202) while the communications device continues to operate; regarding claim 12, receiving, at the backplane switch (201) coupled to the backplane (202), a first data packet with a first Media Access Control MAC address assigned (column 10, line 66 to column 11, line 5) to one of the Backplane plane cards (LINE CARD 1, 2, ..., 8) coupled to the backplane (202); and communicating the first data packet from the backplane switch (201) to the backplane plane card (200) assigned the first MAC address using the backplane (202); regarding claim 13, wherein communicating the first data packet from the backplane switch (201) to the backplane plane card (200) further comprises using an Ethernet protocol (column 13, lines 52-57); regarding claim 14, receiving at

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the backplane switch (201) a second data packet with a second MAC address assigned (column 10, line 66 to column 11, line 5) to an external network device; and communicating the second data packet from the backplane switch (201) to the network device assigned the second MAC address; regarding claim 15, wherein communicating the second data packet from the backplane (202) device to the network device assigned the second MAC address comprises: communicating the second data packet from an external port of the backplane switch (201) to a network switch; and communicating the second data packet from the network switch to the external network device assigned the second network address; regarding claim 16, providing a dedicated bandwidth between the backplane switch (201) and at least one of the Backplane plane cards (LINE CARD 1, 2, ..., 8) using a backplane bus (202) ; regarding claim 17, receiving from a telephone network a request to establish a telephone call with an external network device; identifying an Internet Protocol IP address (column 10, lines 17-31) associated with the external network device; processing data from the telephone call into digital data packets; associating the data packets with the identified IP address (column 10, lines 17-31); and communicating the data packets to the external network device using the backplane switch (201) ; regarding claim 18, wherein the external network device is an LP telephone; regarding claim 19, determining whether the data packets include voice information; and assigning a high priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) level to the data packets by setting one or more priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) bits in each of the data packets in response to determining that the data packets include voice information; regarding claim 21, receiving at a backplane plane card (200) a second data packet from a data network; identifying an Internet Protocol IP address (column 10, lines 17-31)

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associated with the second data packet; communicating the second data packet to an external network device assigned the IP address (column 10, lines 17-31) using the backplane switch (201) ; regarding claim 22, wherein at least one of the Backplane plane cards (LINE CARD 1, 2, ..., 8) may be coupled to the backplane (202) or de-coupled from the backplane (202) while the communications device continues to operate; regarding claim 23, a backplane plane card (200) assigned a first Media Access Control MAC address and coupled to a backplane (202) within a communications device, the card comprising: an internal interface coupled to a backplane bus (202) ; a communication module operable to receive a first data packet from the backplane bus (202) using the internal interface if the first data packet's destination address corresponds to the first MAC address, the communication module further operable to communicate a second data packet to another backplane plane card (200) by associating the second data packet with a second MAC address assigned (column 10, line 66 to column 11, line 5) to the other backplane plane card (200) and communicating the second data packet to the backplane bus (202) using the internal interface; regarding claim 25, wherein the communication module receives the first data packet from the backplane bus (202) and communicates the second data packet to the backplane bus (202) according to an Ethernet protocol (column 13, lines 52-57); regarding claim 26, wherein the backplane bus (202) provides a dedicated bandwidth between the backplane plane card (200) and a backplane switch (201) (201) ; regarding claim 27, wherein the communication module is further operable to communicate a third data packet to a network device external to the communications device by associating the third data packet with a third MAC address assigned (column 10, line 66 to column 11, line 5) to the network device and communicating the third data packet to the backplane bus (202) using the internal interface; regarding claim 28, an

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external port coupled to a telephone network, the external port operable to receive from the telephone network a request to establish a telephone call with a network device external to the communications device; and wherein the communication module is further operable to identify an Internet Protocol IP address (column 10, lines 17-31) associated with the external network device, to process data from the telephone call into digital data packets, and to communicate the data packets to the external network device using the backplane bus (202) ; regarding claim 29, wherein the communication module is further operable to determine that the data packets include voice information and, in response, to assign a high priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) level to the data by setting one or more priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) bits in each of the data packets; regarding claim 31, an external port coupled to a data network, the external port operable to receive a data packet associated with an Internet Protocol IP address (column 10, lines 17-31); and wherein the communication module is further operable to communicate the data packet to a network device assigned the identified IP address (column 10, lines 17-31) using the backplane bus (202) ; regarding claim 32, wherein the backplane plane card (200) may be coupled to the backplane (202) and de-coupled from the backplane (202) while the communications device continues to operate; regarding claim 33, a communications device, comprising: a backplane (202); a plurality of Backplane plane cards (LINE CARD 1, 2, ..., 8) coupled to the backplane (202); and a backplane switch (201) (201) coupled to the backplane (202), the backplane switch (201) operable to receive a first data packet with a first network address assigned to an external network device and a second data packet with a second network address assigned to one of the Backplane plane cards (LINE CARD 1, 2, ..., 8), the backplane



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switch (201) further operable to use a network protocol associated with the first and second network addresses to communicate the first data packet to the external network device assigned the first network address and to communicate the second data packet to the backplane plane card (200) assigned the second network address, wherein the backplane switch (201) communicates the second data packet to the backplane plane card (200) using the backplane (202); regarding claim 34, wherein the network addresses are standard-based network addresses; regarding claim 35, wherein: the network addresses are Media Access Control MAC addresses; and the network protocol is an Ethernet protocol (column 13, lines 52-57); regarding claim 36, wherein the backplane (202) includes a plurality of backplane buses (202) , at least one of the backplane buses (202) providing a dedicated bandwidth between the backplane switch (201) and one of the Backplane plane cards (LINE CARD 1, 2, ..., 8); regarding claim 37, wherein at least one backplane plane card (200) is a gateway card coupled to a telephone network, the gateway card operable to receive from the telephone network a request to establish a telephone call with the external network device, to identify an Internet Protocol IP address (column 10, lines 17-31) associated with the external network device, to process data from the telephone call into digital data packets, to associate the data packets with the identified IP address (column 10, lines 17-31), and to communicate the data packets to the external network device using the backplane switch (201) ; regarding claim 38, wherein the external network device is an IP telephone; regarding claim 39, wherein: the gateway card is further operable to determine that the data packets include voice information and, in response, to assign a high priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) level to the data packets by setting one or more priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53)

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bits in each of the data packets; and the backplane switch (201) is further operable to communicate the data packets including voice information according to the assigned priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) level; regarding claim 41, wherein at least one backplane plane card (200) is a gateway card coupled to a data network, the gateway card operable to receive data packets associated with an Internet Protocol IP address (column 10, lines 17-31) and to communicate the data packets to an external network device assigned the associated IP address (column 10, lines 17-31) using the backplane switch (201); regarding claim 42, wherein at least one of the Backplane plane cards (LINE CARD 1, 2, ..., 8) may be coupled to the backplane (202) and de-coupled from the backplane (202) while the communications device continues to operate; regarding claim 43, a method of communicating data using a communications device, the communications device including a backplane (202) coupled to a backplane switch (201) (201) and a plurality of Backplane plane cards (LINE CARD 1, 2, ..., 8), the backplane switch (201) coupled to at least one network device external to the communications device, the method comprising: receiving, at the backplane switch (201), a first data packet with a first network address assigned to the external network device and a second data packet with a second network address assigned to one of the backplane (202) boards; using a network protocol associated with the first and second network addresses to communicate the first data packet from the backplane switch (201) to the external network device assigned the first network address and to communicate the second data packet from the backplane switch (201) to the backplane plane card (200) assigned the second network address using the backplane (202); regarding claim 44, wherein the network protocol is a standard-based network protocol; regarding claim 45, wherein the first and second network addresses are Media Access

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Control MAC addresses; regarding claim 46, providing a dedicated bandwidth between the backplane switch (201) and at least one of the Backplane plane cards (LINE CARD 1, 2, ..., 8) using a backplane bus (202) ; regarding claim 47, receiving from a telephone network a request to establish a telephone call with the external network device; identifying an Internet Protocol IP address (column 10, lines 17-31) associated with the external network device; processing data from the telephone call into digital data packets; associating the data packets with the identified IP address (column 10, lines 17-31); communicating the data packets from a backplane plane card (200) to the backplane switch (201) ; and communicating the data packets to the external network device using the backplane switch (201) ; regarding claim 48, wherein the external network device is an IP telephone; regarding claim 49, determining whether the data packets include voice information; and assigning a high priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) level to the data packets by setting one or more priority (column 4, line 63 to column 5, line 9; column 6, lines 20-25 and lines 50-53) bits in each data packet in response to determining that the data packets include voice information; regarding claim 51, receiving a third data packet from a data network; identifying an Internet Protocol IP address (column 10, lines 17-31) associated with the third data packet; communicating the third data packet from a backplane plane card (200) to the backplane switch (201) ; and communicating the third data packet from the backplane switch (201) to an external network device assigned the identified IP address (column 10, lines 17-31); regarding claim 52, wherein at least one of the Backplane plane cards (LINE CARD 1, 2, ..., 8) may be coupled to the backplane (202) or de-coupled from the backplane (202) while the communications device continues to operate; regarding claim 53, a backplane switch (201) (201) coupled to a backplane

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(202) of a communications device, the communications device having a plurality of Backplane plane cards (LINE CARD 1, 2, ..., 8) coupled to the backplane (202), the backplane switch (201) comprising: a plurality of internal ports, each internal port associated with a backplane plane card (200) and operable to communicate with the associated backplane plane card (200) using the backplane (202); at least one external port associated with a network device external to the communications device and operable to communicate with the external network device; and a processing module coupled to the internal ports and the external port, the processing module operable to receive a first data packet with a first network address assigned to the network device, to identify the external port associated with the network device, and to communicate the first data packet to the external port for communication to the network device using a network protocol, the processing module further operable to receive a second data packet with a second network address assigned to a backplane plane card (200), to identify one of the internal ports associated with the backplane plane card (200), and to communicate the second data packet to the identified internal port for communication to the backplane plane card (200) using the network protocol; regarding claim 54, wherein the first and second network addresses are standard-based network addresses; regarding claim 55, the first and second network addresses are Media Access Control MAC addresses; and the network protocol is an Ethernet protocol (column 13, lines 52-57); regarding claim 56, wherein the backplane (202) includes a plurality of backplane buses (202) , at least one of the backplane buses (202) providing a dedicated bandwidth between an internal port and an associated backplane plane card (200); regarding claim 57, wherein the external port is coupled to a network switch serving a plurality of external network devices and is further operable to communicate the first data packet with the first

network address to the network switch for communication to the network device assigned the first network address; regarding claim 59, wherein at least one of the Backplane plane cards (LINE CARD 1, 2, ..., 8) may be coupled to the backplane (202) and de-coupled from the backplane (202) while the communications device continues to operate. See column 5-13.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9, 20, 30, 40, 50, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US 6,747,995) in view of Hejza (US 6,577,628).

Brown et al. discloses the claimed limitations above. Brown et al. does not disclose the following features: regarding claim 9, wherein the backplane switch is further operable to examine one or more priority bits in the first data packet, to identify a quality of service level associated with the priority bits according to IEEE 802.1q, and to communicate the first data packet according to the identified quality of service level; regarding claim 20, examining one or more priority bits in the first data packet; identifying a quality of service level associated with the priority bits according to IEEE 802.1q; and communicating the first data packet from the backplane switch to the backplane card according to the identified quality of service level; regarding claim 30, wherein the communication module is further operable to set one or more priority bits in the second data packet to indicate a quality of service level according to IEEE

802.1q; regarding claim 40, wherein the backplane switch is further operable to examine one or more priority bits in the first data packet, to identify a quality of service level associated with the priority bits according to IEEE 802.1q and to communicate the first data packet according to the identified quality of service level; regarding claim 50, examining one or more priority bits associated with the first data packet; identifying a quality of service level associated with the priority bits according to IEEE 802.1q; and communicating the first data packet from the backplane switch according to the identified quality of service level; regarding claim 58, wherein the backplane switch is further operable to examine one or more priority bits in the first data packet, to identify a quality of service level associated with the priority bits according to IEEE 802.1q and to communicate the first data packet according to the identified quality of service level. Hejza discloses a system for implementing QoS comprising the following features: regarding claim 9, wherein the backplane switch is further operable to examine one or more priority bits in the first data packet, to identify a quality of service level associated with the priority bits according to IEEE 802.1q (column 5, lines 22-38), and to communicate the first data packet according to the identified quality of service level; regarding claim 20, examining one or more priority bits in the first data packet; identifying a quality of service level associated with the priority bits according to IEEE 802.1q (column 5, lines 22-38); and communicating the first data packet from the backplane switch to the backplane card according to the identified quality of service level; regarding claim 30, wherein the communication module is further operable to set one or more priority bits in the second data packet to indicate a quality of service level according to IEEE 802.1q (column 5, lines 22-38); regarding claim 40, wherein the backplane switch is further operable to examine one or more priority bits in the first data packet, to identify a quality

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of service level associated with the priority bits according to IEEE 802.1q (column 5, lines 22-38) and to communicate the first data packet according to the identified quality of service level; regarding claim 50, examining one or more priority bits associated with the first data packet; identifying a quality of service level associated with the priority bits according to IEEE 802.1q (column 5, lines 22-38); and communicating the first data packet from the backplane switch according to the identified quality of service level; regarding claim 58, wherein the backplane switch is further operable to examine one or more priority bits in the first data packet, to identify a quality of service level associated with the priority bits according to IEEE 802.1q (column 5, lines 22-38) and to communicate the first data packet according to the identified quality of service level. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Brown et al., by using the features, as taught by Hejza, in order to provide an efficient data communication system by offering customers various levels of service at different price points. See Hejza, column 2, lines 8-13.

### ***Conclusion***

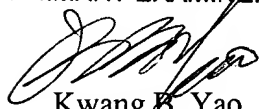
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 703-308-7583. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO  
PRIMARY EXAMINER



Kwang B. Yao  
August 6, 2004